Overview for Questions #1-4 of 88

Question ID: 1626127

TOPIC: FINANCIAL STATEMENT ANALYSIS

THE TOTAL POINT VALUE FOR THIS QUESTION SET IS 12 POINTS

Ali Saminder, CFA, has recently been hired by JJK Holdings, Inc. (JJK), a U.S.-based financial services holding company. JJK has global operations in commercial and investment banking alongside a significant wealth management division, JJK BMD. Saminder is currently on a six-month rotation working in the risk management division of JJK. She is seeking to become familiar with JJK's approach to risk management and the maintenance of an adequate capital base.

Saminder has reviewed an internal document outlining JJK's approach to meeting regulatory requirements and has made a note of two fundamental rules that she believes are used to help analyze capital adequacy.

Rule 1:	When assessing the tier 1 capital ratio, assets should be weighted according to their risk, with riskier assets assigned a lower value than risk-free assets such as cash.
Rule 2:	Off-balance-sheet assets should be excluded from the asset base of the bank when assessing capital adequacy.

The document provided to Saminder outlines JJK's approach to calculating regulatory capital. Extracts from the document are shown in Exhibit 1.

Exhibit 1: Internal Memo—Regulatory Capital Calculation (extracts)

- Tier 1 capital is defined in accordance with global regulatory standards and is appropriately adjusted for intangible and deferred tax assets resulting from losses carried forward.
- Other tier 1 capital consists of irredeemable non-cumulative preferred stock with a fixed divided of 4.3%.
- Consistent with local regulatory standards, Tier 2 capital is comprised of $18,047m of subordinated debt maturing in five years, and a convertible bond issue convertible only at maturity at the end of 20X9 (convertible into common stock).
- JJK Holding has a target tier 1 ratio of 15% and total capital ratio of 20%.
- 20X8 year-end figures are forecast as follows:

	20X8 ($m)
Regulatory capital	
Common equity tier 1 capital	87,390
Additional tier 1 capital	16,401
Tier 2 capital	25,447
Total assets	510,948
Risk-weighted assets	601,312

Saminder notes that the convertible bond is due for conversion in 20X9. She intends to recalculate the 20X8 tier 1 ratio as if the bonds had been converted already.

Saminder has also reviewed an internal memo outlining some key trends over the last three years that were labeled 'Possible concerns?' by a previous employee. However, it was not clear from the document which trends if any were actual cause for concern. The trends included in the documents are shown in **Exhibit 2: Internal Memo—Three-Year Trends**.

Exhibit 2: Internal Memo—Three-Year Trends

	20X5 $m	20X6 $m	20X7 $m
Assets under management[1]	139,398	118,957	108,086
Net outflows[2]	100,483	112,482	196,429
High quality liquid assets	111,432	127,352	198,393
Available stable funding	376,092	376,653	388,624
Required stable funding	327,043	301,275	303,182

[1] Represents client assets managed by JJK BMD Trusts

[2] 30-day liquidity needs in a stress scenario

Which of Saminder's fundamental rules is *most likely* to be accurate?

A) Only rule 1 is accurate.
B) Only rule 2 is accurate.
C) Neither rule is accurate.

Question #2 of 88

Question ID: 1560270

Using the forecasted data and explicit targets given in **Exhibit 1: Internal Memo—Regulatory Capital Calculation (extracts)**, Saminder is *most likely* to conclude that JJK Holdings would:

A) meet its targeted tier 1 ratio and total capital ratio.
B) meet its targeted tier 1 ratio but not its targeted total capital ratio.
C) fail to meet either target.

Question #3 of 88

Question ID: 1560271

How are tier 1 capital and total capital *most likely* to change when Saminder makes her stated adjustment for the convertible bonds?

A) Common equity tier 1 capital and total capital will both remain unchanged.
B) Tier 1 capital will increase and tier 2 capital will decrease.
C) Other tier 1 capital will decrease and total capital will remain unchanged.

Question #4 of 88

Question ID: 1626128

Using the data in **Exhibit 2: Internal Memo—Three-Year Trends**, which of the following statements is *most* accurate?

A) The number of days JJK can withstand a stress-level-volume of cash outflows decreased by three days from 20X5 to 20X7.
B) The liquidity coverage ratio decreased in each of the two years.
C) The trend in net stable funding ratio indicates an increase from 20X5 to 20X7 in highly liquid funding available, compared to the level of funding required.

Overview for Questions #5-8 of 88

Question ID: 1630309

TOPIC: FINANCIAL STATEMENT ANALYSIS

THE TOTAL POINT VALUE FOR THIS QUESTION SET IS 12 POINTS

Roleo is a large U.S. multinational with subsidiaries around the world and prepares its financial statements in accordance with the U.S. GAAP. Among these subsidiaries is Simlair Industries. Alex Dudda, CFA, is one of the equity analysts following Roleo. Roleo has a defined benefit pension plan for its employees.

In preparing his research report, Dudda makes the following observations in the working documents:

Defined Benefit Pension Plans

Dudda noted that the assumed higher expected rate of return on plan assets reduces reported pension expense but does not affect the PBO, and thus increases the plan's funded status.

Employee Share Option Scheme

Roleo also has an employee share option scheme. Just as there is a cost to Roleo for its defined benefit scheme, the cost of Roleo's share option scheme will be charged as an expense to the income statement and hence reduce retained earnings and equity even if there is no cash outlay.

Question #5 of 88

Question ID: 1560264

Assume the country where Simlair is operating has been experiencing 30% annual inflation over the past three years and that Simlair has a net monetary liability position. Which of the following best describes the effect on Roleo's consolidated financial statements?

A) A gain is recognized in the income statement.
B) A loss is recognized in the income statement.
C) A gain is recognized as a direct adjustment to the balance sheet.

Question #6 of 88

Question ID: 1560265

Assume that Simlair is a significantly integrated sales division of Roleo, and that Roleo makes virtually all of the operating, investing, and financing decisions. The foreign currency gains and losses that arise from the consolidation of Simlair should be reported in:

A) shareholders' equity.
B) operating cash flow.
C) net income.

Question #7 of 88

Question ID: 1630310

Dudda's statement about defined benefit pension plans is *most likely*:

A) correct.
B) correct about PBO but incorrect about funded status.
C) correct about funded status but incorrect about PBO.

Question #8 of 88

Question ID: 1626126

Dudda's comments regarding Roleo's employee share option scheme are *most likely*:

A) correct.
B) incorrect because the cost of issuing shares under an employee stock option scheme will be taken directly to equity via OCI and hence not reduce retained earnings.
C) incorrect as the cost of issuing shares under an employee stock option scheme will not reduce equity.

Overview for Questions #9-12 of 88

Question ID: 1561802

TOPIC: CORPORATE ISSUERS

THE TOTAL POINT VALUE FOR THIS QUESTION SET IS 12 POINTS

Dan Andrews, CFA, is the equity analyst for a large pension fund. One of the fund's holdings is Debian Corporation, based in Country A, an emerging market economy. Debian recently divested a division, and wants to distribute the resulting proceeds to its shareholders. Andrews collects the information on Country A, as shown in Exhibit 1.

Exhibit 1: Select Information on Country A

> Country A is a rapidly growing emerging market economy. Its 20-year benchmark currency–denominated sovereign debt currently offers an attractive 8% yield. Current tax rates are investor friendly and are 12% for both dividends and capital gains, while the corporate tax rate is 30%. The standard deviation of equity returns is 19%; for bond returns, it is 12%.

Andrews discusses Debian's current dividend policy with Sarah Givens, a senior economist with the fund. Givens makes the following statements:

Statement 1:	Shareholders can plan their financial budget assuming a specific dividend income. Higher dividends makes them less reliant on uncertain income from their other investments, a preference they exhibit while choosing which investments to continue to hold.
Statement 2:	Shareholders are acutely aware of their tax situations, and always want to maximize their after-tax cash flows, if given a choice.

The 20-year benchmark sovereign bond yield is currently 6%. Andrews plans on using the international capital asset pricing model (ICAPM) to estimate Debian's cost of capital. Givens states that the ICAPM prices two risk factors: (1) a benchmark market index factor, and (2) a foreign currency–denominated, *wealth-weighted* market index.

Question #9 of 88

Question ID: 1561803

Regarding Debian's plan to distribute the cash flow from the divested business, which of the following is the *most likely* course of action for the company?

A) Increase regular dividends.

B) Pay a special dividend instead of an increase in regular dividends.

C) Pay dividends instead of a stock repurchase to preserve flexibility.

Question #10 of 88

Question ID: 1561804

Regarding statements made by Givens, which of the following is *most accurate*?

A) Statement 1 is consistent with the bird-in-hand theory, while Statement 2 is consistent with the dividend irrelevance theory.

B) Statement 1 is consistent with the dividend irrelevance theory, while Statement 2 is consistent with tax minimization theory.

C) Statement 1 is consistent with dividend preference theory, while Statement 2 is consistent with tax aversion theory.

Question #11 of 88

Question ID: 1561805

What is the estimate of CRP to use in estimating Debian's required return on equity?

A) 2.00%.

B) 3.17%.

C) 0.38%.

Question #12 of 88

Question ID: 1561806

Givens's statement about the ICAPM is:

A) correct.

B) incorrect about the second factor because it is based on an equally weighted market index.

C) incorrect about the first factor because it is based on a global market index.

Overview for Questions #13-16 of 88

Question ID: 1560283

TOPIC: EQUITY VALUATION

THE TOTAL POINT VALUE FOR THIS QUESTION SET IS 12 POINTS

Carl Warner, CFA, has been asked to review the financial information of Global Drug World (GDW) in preparation for a possible takeover bid by rival competitor Consolidated Drugstores International (Consolidated). GDW has produced impressive results since going public via an initial public offering in 2008. Through a program of aggressive growth by acquisition, GDW is currently seen as a major player and a threat to Consolidated's own plans for growth and profitability. In preparation for his analysis, Warner has gathered the following financial data from GDW's year-end statements.

GDW Statement of Income for Year Ended May 31, 2018	
Sales	4,052,173
Expenses	
Cost of goods sold, general and operating expenses	3,735,397
Noncash charges	56,293
Interest on long-term debt	20,265
Other interest	5,223
	3,817,178
Income before income taxes	234,995
Income taxes	70,499
Net income	164,497
Earnings per share	0.72

Partial GDW Balance Sheet on May 31, 2018	
Assets	
Current assets (excluding cash)	
Accounts receivable	284,762
Inventories	490,755
Prepaid expenses	23,743
Total current assets (excluding cash)	799,260
Property, plant, and equipment	687,890

Other assets	236,417
Liabilities	
Current liabilities (excluding notes payable)	
Accounts payable and accrued liabilities	296,564
Other	100,039
Total current liabilities (excluding notes payable)	396,603
Long-term debt	262,981
Other liabilities	15,484

Additional Information	
Risk-free rate	4.5%
WACC	7.5%
2018 working capital investment	$7,325
2018 dividends	$82,248
Beta	1.10
Investment in fixed capital in 2018	$143,579
Market risk premium	5%
Total equity May 31, 2017	$1,019,869
Principal repayment of long-term debt in 2018	$33,275
Notes payable issued in 2018	$5,866
2018 change in liabilities	$27,409
Tax rate	30%

As part of his analysis, Warner needs to forecast the free cash flow to the firm (FCFF) for 2019. The best information he has points to an increase in sales of 6%. The earnings before interest and tax (EBIT) margin is not expected to change from the rate of 6.4% achieved in 2018. Fixed capital spending is expected to be $36,470. Investment in net working capital is expected to be $24,313. Moreover, Warner notes that the only noncash charge is depreciation, which he estimates will be $60,000.

Warner has been asked to analyze the effect each of the following corporate events, if taken during 2019, would have on GDW's free cash flow to equity (FCFE):

- 20% increase in dividends per share.
- Repurchase of 25% of the firm's outstanding shares using cash.
- New common share offering that would increase shares outstanding by 30%.
- New issue of convertible bonds that are not callable for five years and would increase the level of debt by 10%.

Warner is also interested in valuing Betacorp, another acquisition possibility for Consolidated. Warner notes that Betacorp is a mature, profitable company with generous dividend payments, which has resulted in a volatile capital structure for the company.

Question #13 of 88

Question ID: 1560284

By how much (in dollars) does GDW's FCFF exceed its free cash flow to equity (FCFE) in 2018?

A) $9,567.
B) $45,251.
C) $52,897.

Question #14 of 88

Question ID: 1560285

The 2019 estimate of FCFF is *closest* to:

A) $191,646.
B) $210,329.
C) $215,329.

Question #15 of 88

Question ID: 1560286

Which corporate event that Warner is analyzing is *likely* to have the largest effect on FCFE in 2019?

A) Share repurchase.
B) Share offering.

C) Convertible bond issue.

Question #16 of 88

Question ID: 1560287

Which of the following approaches would Warner *most appropriately* use to value Betacorp?

A) FCFF approach.
B) FCFE approach.
C) Dividend discount approach.

Overview for Questions #17-20 of 88

Question ID: 1560288

TOPIC: EQUITY VALUATION

THE TOTAL POINT VALUE FOR THIS QUESTION SET IS 12 POINTS

Marie LeBlanc, CFA, is an analyst at Lee Nguyen Investments, an international equities investment firm. LeBlanc has been asked to value two European cosmetics companies, Schön AG and Hermosa S.A.

The beauty products industry is a mature industry with few competitors. One segment that is growing is luxury skin care; while the cosmetics industry is expected to grow at a steady rate of 3.5%, the luxury skin care segment is expected to grow at 5.5%.

Schön AG, based in Frankfurt, Germany, is the largest company in the luxury skin care segment of the cosmetics industry. Schön is considered a very stable company within the cosmetics industry and the luxury skin care segment. Schön's equity beta is 1.00.

LeBlanc collects selected financial information from Schön's income statement and cash flow statement (for the last fiscal year) and from Schön's balance sheet (for the last two fiscal year ends). The information is shown in Exhibit 1. Negative numbers are indicated in parentheses. There is no preferred stock, and no long-term asset sales occurred in 20X9.

Exhibit 1: Selected Schön Financial Information (€ millions except for rates and ratios)

Income Statement	20X9	Balance Sheet	20X8	20X9
Revenue	4,250	Total current assets	2,408	2,577
EBITDA	1,461	Net PPE	3,794	4,150
Operating income	1,169	Notes payable	600	644
Interest expense	150	Long-term debt	2,020	2,070
Income tax rate	30%	Total liabilities	3,210	3,378
Dividends	357	Total equity	2,992	3,349

Other Information	20X9
CF from operations	1,042
CF from investing	(648)
Risk-free rate	2.50%
After-tax cost of debt	4.50%
Cost of equity	8.50%
Target D/E ratio	1.00

Hermosa S.A., based in Barcelona, Spain, is the third largest company in the luxury skin care segment of the cosmetics industry. Hermosa is considered a growth company within the cosmetics industry and the luxury skin care segment. Hermosa has not issued bonds and all of Hermosa's debt is considered short and intermediate term. For the fiscal year 20X9, FCFF is €143 million and FCFE is €136.23 million. Hermosa pays no dividends. Hermosa's earnings are expected to grow at 14.0% for three years and then at the expected overall rate of growth in the luxury skin care segment. Hermosa's equity beta is 1.20. The risk-free rate is 2.5%. Hermosa's target weight for debt is 25.0%. Hermosa has 200 million shares outstanding.

Elizabeth Nguyen, one of the partners at Lee Nguyen Investments, approaches LeBlanc about a client interested in buying Hermosa S.A. Nguyen asks LeBlanc about using the residual income method to value Hermosa.

Statement 1:	Residual income models can be used with a variety of inventory cost flow assumptions without any adjustments.
Statement 2:	If the company has any special purpose entities that are not consolidated, we need to adjust the reported financial

statements, effectively consolidating the SPE, before applying the residual income method.

Question #17 of 88

Question ID: 1560289

The free cash flow to equity for Schön AG for 20X9 is *closest* to:

A) €439 million.
B) €488 million.
C) €499 million.

Question #18 of 88

Question ID: 1560290

Assuming that the growth rate of Schön earnings is equal to the overall cosmetics industry growth rate, the value of the firm is *closest* to:

A) €17.2 billion.
B) €33.6 billion.
C) €49.9 billion.

Question #19 of 88

Question ID: 1560291

The estimated value of Hermosa stock using FCFE valuation is *closest* to:

A) €19.70.
B) €21.40.
C) €22.10.

Question #20 of 88

Question ID: 1560292

Regarding LeBlanc's statements to Nguyen:

A) both statements are correct.

B) neither statement is correct.

C) only one statement is correct.

Overview for Questions #21-24 of 88

Question ID: 1560293

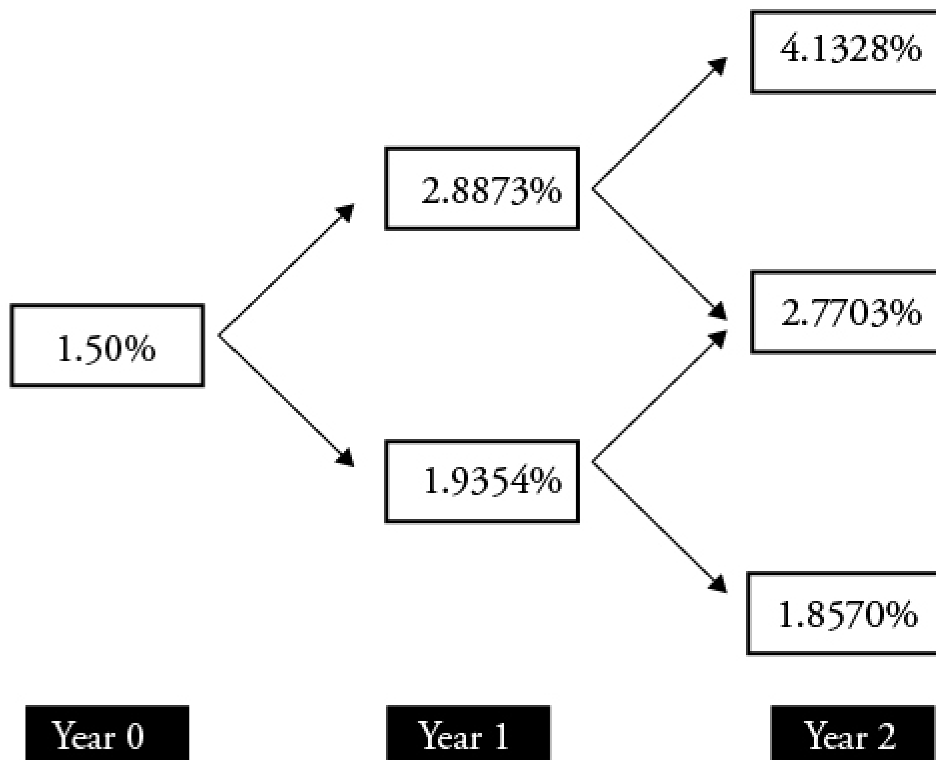
TOPIC: FIXED INCOME

THE TOTAL POINT VALUE FOR THIS QUESTION SET IS 12 POINTS

Rafael Dias joined Banco Apice S.A. last year as a junior bond analyst.

Gabriela Gomes, Dias's immediate supervisor, provides him with a binomial interest rate tree with a 20% volatility assumption as shown in Exhibit 1.

Exhibit 1: Binomial Interest Rate Tree



Guilherme da Silva, one of the bond traders at Apice, provides Dias with information about several trades currently being evaluated. Exhibit 2 shows data about two of the bonds.

Exhibit 2: Selected Information on Potential Trades

Characteristic	Bond A	Bond B

Maturity	3 years	2 years
Option	Callable at par at t = 1 year	Putable at par at t = 1 year
Coupon	2%	1.50%
Par Value	$100	$100

Da Silva asks Dias the following questions:

Question 1:	Which bond in Exhibit 2 is most likely to exhibit negative convexity?
Question 2:	For a given decline in interest rate, which bond is most likely to have lower upside potential?
Question 3:	If interest rates rise, which bond is most likely to see its effective duration increase?

Question #21 of 88

Question ID: 1560294

The price of Bond A in Exhibit 2 is *most* accurately described as being sensitive to shifts in:

A) the one-year par rate only.
B) the three-year par rate only.
C) both the one-year and three-year par rates.

Question #22 of 88

Question ID: 1560295

The *most* accurate answers to Da Silva's Question 1 and Question 2 are:

	Question 1	Question 2
A)	Bond A	Bond A
B)	Bond A	Bond B
C)	Bond B	Bond A